

General Environmental Incident Summary

Incident: 3479 **Date/Time Notice:** 9/29/2014 0900 **DEM Incident No:**
Responsible Party: S Grover Construction
Date Incident: 9/29/2014 **Time Incident:** 2359 **Duration:** 24 hours
County: Williams **Twp:** 157 **Rng:** 98 **Sec:** 22 **Qtr:**
Lat: 48.40854 **Long:** -103.34080 **Method:** Interpolation from map
Location Description: 223 N 4000 E

Submitted By: Eric Moosman **Affiliation:** Operations Consultant
Address: 2195 South Statelin
City: Driggs **State:** ND **Zip:** 83422

Received By:

Contact Person: Stephen Grover
223 N 4000 E
Rigby, ND 83442

Distance Nearest Occupied Building: 3 Miles **Release Contained:** Yes

Type of Incident: Vehicle Accident

Description of Released Contaminant: Production water from Oil Well pad

Volume Spilled: 30.00 barrels **Ag Related:** No

EPA Extremely Hazardous Substance: Unknown **Reported to NRC:** Unknown

Cause of Incident:

Slanted shoulder gave way. Trailer went off road and pulled power unit off too.

Risk Evaluation:

No Immediate Risk

of Fatalities: 0 **# of Injuries:** 1 **Affected Medium:** 03 - soil

Potential Environmental Impacts:

Vegetation/grass in area may have challenge in growth.

Action Taken or Planned:

Spill cleaned up. Soil replaced.

Wastes Disposal Location: A solid waste disposal location (Indian Hills)

Agencies Involved: State Highway Patrol

Updates

Date: 9/30/2014 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Arrived on location at 16:45 CT. Met with company representative who guided me to the spill location and showed me the area where the produced water saturated the ditch soil. The tanker had apparently unhooked from the semi and tipped on it's side approximately 100 feet down-slope of the road and unloaded a portion of it's contents onto a concave portion of the ditch that was in an approximate 40 foot radius. EC readings were conducted on the soils in the area, showing background readings around 200 to 300 microsiemens/cm. Readings taken where the soils had been impacted showed readings of OR (out of Range) to 25.6 milli-siemens/cm from 0 to 2 feet in depth.

Suggested to the company representative that they contract with a environmental consultant to delineate extent (horizontal and vertical) of the release before any excavation. Also asked him to contact county highway department to get clearance before digging to eliminate any ditch bank structural issues.

Company representative will contact the department before any remediation of release.

More followup required.

Date: 9/30/2014 **Status:** Reviewed - Follow-up Required

Author: Roberts, Kris

Updated Volume:

Notes:

Both incident and notice dates showed 9/30/2014, however this was incorrect. Accident occurred and was reported to NDDoH on 9/29/2014. A NDDoH inspector was on location on 9/29/2014 so actual dates could be verified and the main record was changed accordingly. Expect update report now that EIR entry has been submitted.

Date: 11/5/2014 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Arrived on location at 13:00. 41 degrees F, mostly cloudy, NW wind 15-25 mph. Observed site and took photos. Areas impacted by the accident and release had not been remediated or cleaned, with plastics, metals and glass still remaining from the truck. The area where the release occurred remained the same as last inspection. Several oil, fuel and fluid stains along the ditch were noted during the inspection. More followup required.

Date: 6/15/2015 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Arrived on location at 17:30. 63 degrees F, Mostly sunny, NE wind 5-10 mph. Walked the area and took photos. The area where the production water had been released showed dead vegetation in an area approximately 90' by 30'. Two soil samples were collected. One from the visibly impacted area and one from an area north of the dead vegetation for a background. Further followup needed.

Date: 6/22/2015 **Status:** Correspondence

Author: O'Gorman, Brian

Updated Volume:

Notes:

Information was forwarded to Emily of the Waste Management Division regarding the responsible party contracting to clean up the release, but was told to not move forward and the responsible party would take care of the spill. Emails with the forwarded information entered into the report folder.

Date: 11/17/2015 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Arrived on location at 10:15. 27 degrees F, Sunny, SW wind 10-15 mph. Walked the area and took photos. The initial area known to have been impacted showed the same dead vegetation, with some petroleum stained soils and vegetation. Dead vegetation, rutting and bare soil areas appeared more extensive than when first inspected. Estimated area of soils and vegetation impacted by mechanical and chemical impacts was approximately 300' by 140'. Heaviest impacted area had appeared (discolored vegetation) to have moved further west along a drainage area that moved down-gradient to the west, since the last inspection. Further follow-up needed. LOAN letter or NOV may be needed due to apparent non-interest in remediation of the release from the responsible party.

Date: 12/2/2015 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Adding completed lab sample log numbers for the location: 15-C520 (middle of impacted area, 48.41001, -103.34249) and 15-C521 (background, 48.41010, -103.34248). Further followup needed.

Date: 5/18/2016 **Status:** Inspection

Author: O'Gorman, Brian

Updated Volume:

Notes:

Arrived on location at 13:15. Observed site and took photos. Area of concern appeared to remain impacted with no remediation undertaken. Photos added to the folder. More follow-up needed.

Date: 6/6/2016 **Status:** Correspondence

Author: O'Gorman, Brian

Updated Volume:

Notes:

Received an email regarding the environmental consultants assessment to treat in place, re-seed with grass and add calcium nitrate as an amendment for the remediation of the impacted drainage area. Consultant also states that some clay soil must have bounced out of a side dumper along the road resulting in the non-vegetative area near the road. Email added to the folder.

Date: 6/16/2016 **Status:** Correspondence

Author: O'Gorman, Brian

Updated Volume:

Notes:

Received an email from the company contact discussing attempts to contact the property owner. Email placed into folder. More follow-up needed.

Date: 6/16/2016 **Status:** Correspondence

Author: O'Gorman, Brian

Updated Volume:

Notes:

Received an email from the company contact regarding my response to an earlier email. Email added to folder. More follow-up needed.

Date: 8/9/2016 **Status:** Correspondence

Author: O'Gorman, Brian

Updated Volume:

Notes:

Received an email from the environmental consultant with a Site Assessment and Remediation Alternatives report. Email and report added to incident folder. More follow-up needed.

Updated Volume:**Notes:**

Received an email with a Site Remediation Summary Report. Summary states that vegetative cover had resumed across the entire site, even prior to treatment. A portable soil conductivity meter was used to obtain three perimeter sampling points which showed electrical conductivity values below 1.2 millisiemens per centimeter (mS/cm) around the perimeter. The report also states that they encountered "fat clay" at 4 feet which caused them to discontinue assessing the depth of the impacts any more than 4 feet. No samples were obtained because of this. Three soil samples were submitted for analysis at 1.5 feet below ground surface on perimeter points. No attempts were made to collect samples from any depth at the center of the observable impacted area. The report stated that smooth brome, maximilian sunflower, kochia and leafy spurge have begun to grow in the impacted area. Part of the remediation involved tilling down 8 inches and adding 150 pounds of citric acid (C₆H₈O₇) and 150 pounds of calcium carbonate and spreading across the impacted area. Native grass seed was spread on the tilled soil, and sand bags were installed to hold water during precipitation events to accelerate the remediation. Post-remediation site visit will occur next year to make sure vegetation is growing accordingly. Email and report added to incident folder. More follow-up needed.